

Craig coming into the office on his bike. May 2004.

Farewell to a Phoenix Forecaster

By Craig Ellis, Lead Forecaster and Charlotte Dewey, Meteorologist Intern, NWS Phoenix

Craig's interest in weather began at age 7 while growing up in Hollywood, California in the 1960s. He had just gone to bed one Sunday night when there was a bright flash of light followed by a loud noise and rumbling. He jumped up on his bed to look outside the window and saw that it was raining. He then opened his bedroom door to the living room where his mother and father were watching The Ed Sullivan Show and asked them what the bright light and noise were. Thunderstorms are rare in Hollywood, so at that young age he did not remember experiencing a thunderstorm before. After that night, his dad, who is from England, gave him a book on meteorology that he had when he was with the Royal Air Force during the 2nd World War. His dad studied this book while training to fly in Elementary Flying Training School (EFTS) in De Winton near Calgary, Alberta, Canada and Service Flying Training School (SFTS) in Gimli on Lake Winnipeg, Manitoba, Canada, about 50 miles north of Winnipeg. His dad told Craig how to tell a warm front was approaching with cirrostratus clouds, etc. However, his dad said it wasn't long before Craig knew more than he did about meteorology! Craig also started calling the U.S. Weather Bureau recorded forecasts, writing the information down, and posting those forecasts each morning on the service porch entrance to his grandparents' house that was in front of where his parents, sister, and he lived. He also started listening to weatherman Bill Keene on KNX News Radio in a segment called "Sports and Weather Together" at 5:20 each weekday afternoon.

Craig's first visit to the U. S. Weather Bureau was more than 44 years ago in 1967 at the age of 11 when Craig's Dad drove him from their home in Hollywood to the U. S. Weather Bureau in Los Angeles which, at that time, was located at Los Angeles International Airport (LAX). As early as age 13, Craig would use reel-to-reel tape to record the nightly Frost Forecasts (in the winter) for California and Arizona that were broadcast by meteorologists Dale Harris and Ron Hamilton from the Weather Bureau Fruit Frost Service in Pomona on clear channel station KFI 640 AM Radio in Los Angeles. Little did Craig realize then that one day he would become the forecaster in one of the frost districts (the Salt River Valley Frost district) that was mentioned in those nightly broadcasts. And, little did he realize that he would work indirectly with Ron Hamilton and provide frost forecasts and observations to Ron. During a trip to the annual Frost Conference in Riverside, California, Craig also had the

pleasure of meeting Dale Harris at Dale's home in Riverside in the late 1980s before Dale passed away. Craig gave Dale a copy of some of the tape recordings that he made of Dale and Ron.

As a young teenager growing up in Southern California with no Internet in the early 1970s, Craig bought a Weather Radio to listen to National Weather Service broadcasts. He also bought a radio with Short Wave and Long Wave frequencies. He was then able to listen to the Transcribed Weather Broadcasts (TWEBS) for pilots, Terminal Aerodrome Forecasts (TAFS) for selected international airports in the western United States, and High Seas Weather Forecasts. At night, he listened to weather reports from distant AM Radio stations such as KBOI in Boise, KSL in Salt Lake City, KCBS in San Francisco, KFBK in Sacramento with reports including frost forecasts directly from Milo Radulovich, Norm Benesh, and Dave Wise at the National Weather Service Sacramento, and frost forecasts from Bakersfield. He also listened to frost forecasts for San Diego County by Walt Hattman and later Norm Peters, and for California and Arizona by Dale Harris and Ron Hamilton from the Weather Bureau Fruit Frost Service in Pomona broadcast on KFI in Los Angeles.

In October 1972 (after moving to the San Diego area), his parents took Craig and his best friend to an open house at the National Weather Service Office (WSO) in San Diego which was then located at Lindbergh Field. It was there that he met Meteorologist-In-Charge Claire Jensen. What an exciting day that was! The television cameras were there and there was a thunderstorm in progress...unusual for San Diego! Needless to say, Claire and staff were very busy that afternoon/evening. Claire was later promoted to Meteorologist-In-Charge at the Phoenix office early in Craig's career here. As of January 2012, Craig has known Claire for nearly 40 years! What an honor it was for Craig to have Claire at his (Craig's) retirement party Saturday night, 7 January 2012. Speaking of the retirement party, before Craig became interested in meteorology, his main interest was astronomy when he was 5 and 6 years old. His interest in astronomy must have continued, because at Craig's retirement party, Ken Waters, Warning & Coordination Meteorologist at the National Weather Service in Phoenix, gave Craig a World's Finest Solstice Focal Point "Certificate" for Craig's Last Solstice Statement issued at 9:21 AM MST, 21 December 2011!

Craig continued his passion for weather and went on to receive a degree in Meteorology from UCLA. After graduation, the National Weather Service assigned him to an intern position at the Phoenix office. Craig arrived in Arizona and at the National Weather Service in Phoenix for the first time Saturday, 24 June 1978 and started his first day at work Monday, 26 June 1978. However, his roots in the National Weather Service go back to September 1974 at the Weather Service Forecast Office (WSFO) Los Angeles where he worked part-time for nearly 4 years while he was a student at UCLA. It was at the National Weather Service in Los Angeles where he met Ellie Voeste, the Supervisory Meteorological Technician at that time. He met her the very first day he arrived. She was so kind, generous, and tremendously helpful, training him and introducing him to the rest of the great staff who worked there all those years ago. While working there, Craig also got to meet Dr. George Fischbeck whom he had been watching on KABC-TV Channel 7 in Los Angeles in the mid and late 1970s. Dr. George (as he was known then) would make many weekday visits to the office before his evening weather broadcasts. Craig also enjoyed working with the staff at the National Weather Service office in Sacramento for 2 weeks in September 1977 just prior to starting his senior year at UCLA.

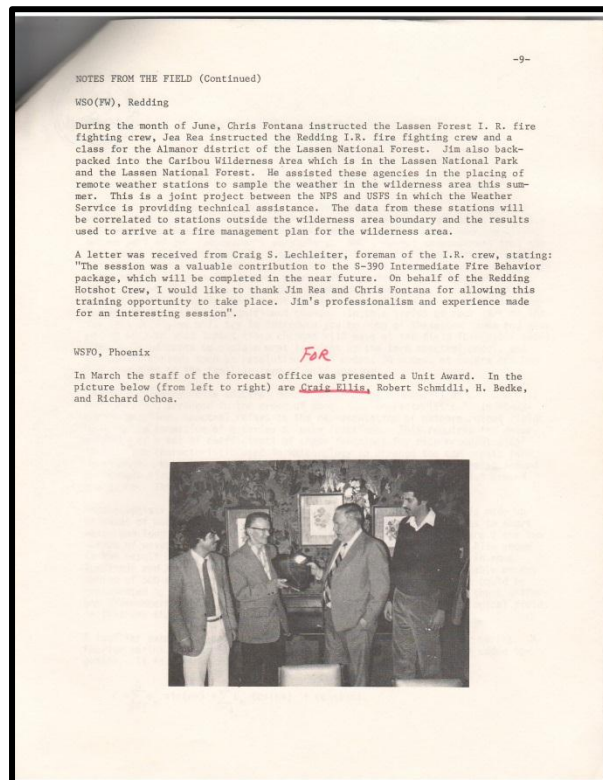
Craig is extremely grateful to Claire Jensen, not only for his encouragement before Craig officially started working at the National Weather Service, but also for promoting Craig from intern to the position of Agricultural Meteorologist in Phoenix in December 1982. Craig's two main interests were frost forecasting and thunderstorms. When Claire promoted Craig to Agricultural Meteorologist, Craig issued the Salt River Valley Frost Forecasts in the winter and was still able to forecast thunderstorms in

the summer..."the best of both worlds"!

When Craig became the Agricultural Meteorologist, part of his duties were to fill in for Fire Weather Forecaster Bob Berkovitz on Bob's days off and when Bob was dispatched to a fire. Craig continued to be the Agricultural Meteorologist at the Phoenix office until the program was turned over to the private sector in the summer of 1996. In addition to being the Agricultural Meteorologist, Craig was also the Media Focal Point. As Media Focal Point, he would do interviews with the media, help solve communication problems, and co-organize media seminars.

Having worked in 5 different decades from the 1970s to the 2010s, Craig saw significant changes in technology during the course of his career. When he started in the 1970s, communication was primarily through teletype and facsimile. Keep in mind that, in 1978, the teletype had already been in use in the Weather Bureau/Weather Service for 50 years since 1928. At the Los Angeles office, weather radar data was limited to teletype and facsimile transmission of FAA Air Traffic Control radar which switched modes once-per-hour for weather detection. At the Phoenix Sky Harbor office, a telewriter was used for local transmission of weather observations from the weather station to the FAA facilities at Sky Harbor including the Control Tower and Departure/Approach Control. With the telewriter, the weather observer would write the observation with an electronic pen and the recipients would see a bar with an attached pen underneath write, like a ghost, the same thing in real time. Ceiling/cloud height was estimated or measured using USDA-U. S. Weather Bureau equipment dating back at least to the 1930s and visibility was estimated using known landmark distances by the observer for the weather observations. As a tribute to this newsletter, "The Four Peaks Post", it is mentioned here that the distance from Sky Harbor to Four Peaks is 45 miles. Thus, a visibility of 45 miles was used in the official Sky Harbor observation if the observer could see Four Peaks! A Local Warning Radar, the WSR-74C, was installed at the Phoenix office at Sky Harbor in early 1978.

In the Phoenix office, the Automation of Field Operations and Services (AFOS) computer system replaced the teletype and facsimile for transmission of text products and weather maps in 1981. The national network Doppler radar, WSR-88D, was installed in the Phoenix area in early 1993. The Automated Surface Observing System (ASOS) was installed at Phoenix Sky Harbor by 1994. This included automatic measurement of ceiling, cloud height and visibility. With ASOS, the maximum reported visibility became 10 miles even when the visibility is much greater. The Advanced Weather Interactive Processing System (AWIPS) was installed at the Phoenix office in 1999. It integrated all meteorological and hydrological data including satellite and radar data for the first time. Besides the Doppler radar, it was the most significant advancement that Craig saw in his career. Dual-polarization technology was installed in the existing Doppler radar, WSR-88D, in the Phoenix area in May 2011, providing the ability to collect data on the horizontal and vertical properties of weather (e.g., rain, hail) and non-weather (e.g., bird, insect, ground clutter) targets. Of course, the Internet was another major technological communication advancement for all of us!



Western Region Staff
Notes with Craig, Bob
Schmidli, current (at
the time) Western
Region Director Hazen
Bedke, and Rick
Ochoa receiving an
award for a record low
observation error rate
at Sky Harbor.

Craig also had the pleasure of working with some “real comedians” in the National Weather Service. One of those “comedians” was meteorologist Bob Behm who, along with The Arizona Republic's Vern Peyser, created the legend of “Agua Fria Freddy”, a sidewinder rattlesnake and Arizona's answer to Punxsutawney Phil. Another “comedian” was forecaster Milo Radulovich, whom Craig worked with for the short time he was at the National Weather Service in Sacramento in September 1977. Years earlier, in August 1953 during the McCarthy Era, Milo, a lieutenant in the Air Force reserve was discharged because his father and sister were accused of being communists. This came to the attention of Edward R. Murrow, a prominent pioneer of television news and host of the popular “See It Now” program on CBS Television. On the 20th of October 1953, Murrow devoted the entire program to Milo Radulovich. After that program, the Air Force reinstated him. That historic television program about Milo heightened awareness of the Cold War assault on civil liberties. It also played a key role leading to the 9th of March 1954 airing of the “See it Now” program about Senator Joseph McCarthy and his anti-communist crusade. Those historic television programs led to the downfall of McCarthy and the McCarthy Era. “See It Now” producer Fred Friendly said, "We never could have done the McCarthy program without the Milo Radulovich program." The story of Edward R. Murrow, Milo Radulovich, and the downfall of Senator Joseph McCarthy was depicted in "Good Night, and Good Luck", the Oscar nominated fact-based 2005 George Clooney film. Milo appears in the film in actual footage from the 20th of October 1953 broadcast of “See It Now”. He was also consulted by the producer on the film and gave the film his approval.

While Craig was at Sacramento, the Meteorologist-In-Charge, Gemo Yakubovsky, told Craig that at least 50 percent of what we do in the National Weather Service is communicate...something that Craig kept in mind throughout his career.

It was also an honor for Craig to work with the amazing Bob Schmidli, a “Climatological Weather Wizard”. Bob was meticulous in his record-keeping. Bob's record for keeping the Phoenix Sky Harbor

observation error rate at a record low is legendary. Bob and his meteorological staff, including Craig as a young intern, went 38 consecutive months without an observational error – and had a 4-year error rate of 0.01 ending in December 1982. One of Bob's many philosophical sayings was, “Life is one long vacation for he who loves his work.” That has certainly held true for Craig.

Some of the many awards and accomplishments throughout Craig’s career focused around the Agricultural Frost Forecast program and automating routine procedures. He worked countless hours writing computer scripts for various office programs including the weather radio program. One of the awards he is especially proud of is a Special Act/Service Award presented to him in 1985. The award was for his “excellent job of predicting the cold air intrusion (and hard freeze at the end of January and beginning of February), several days in advance and extra effort and background work that resulted in an estimated savings of at least 50 million dollars in citrus crops in the state of Arizona”. Craig really took pride in the Agricultural Frost Forecast program, and it showed.

On his last operational shift in the National Weather Service (Thursday, 29 December 2011) the day before his last day at work, Craig wrote his last Area Forecast Discussion (AFD) and included this paragraph at the end:

“WELL...THIS IS IT...IT IS TIME FOR THE CHANGING OF THE GUARD. IT HAS BEEN A GREAT ONE THIRD OF A CENTURY WORKING HERE AT THE NATIONAL WEATHER SERVICE IN PHOENIX AND A GREAT 37 YEARS WORKING FOR THE NATIONAL WEATHER SERVICE OFFICES AT THE FEDERAL BUILDING IN WEST LOS ANGELES PART TIME SEPTEMBER 1974 TO JUNE 1978...SACRAMENTO IN SEPTEMBER 1977...AND PHOENIX JUNE 1978 TO DECEMBER 2011. IT HAS BEEN AN HONOR TO SERVE. I HAVE BEEN VERY FORTUNATE TO WORK WITH GREAT PEOPLE. I WILL MISS THEM AND I WILL MISS WORKING FOR YOU. I WISH YOU WELL. AND WITH THAT...IT IS TIME FOR ME TO SAY FAREWELL. “

As of Wednesday, 26 October 2011, Craig worked at the National Weather Service Phoenix office for one third of a century. He has really enjoyed working with great people here all those years! Craig retired at the end of last year, Saturday, 31 December 2011. He was the last National Weather Service Phoenix forecaster/employee that started working at the Phoenix office in the 1970s. He thanks you for helping make it a great one third of a century plus career for him in the National Weather Service!